



## **JEFFERSON LAB EH&S COMMITTEE MEETING**

**January 7, 2005**

**9:00 AM - 10:00 AM, CEBAF Center Room A110**

### **ATTENDEES:**

#### **JEFFERSON LAB EH&S Committee Members:**

James Murphy (Chairman)

Carter Ficklen

John Kelly

Robert May

Dennis Skopik

Sandy Prior

#### **JEFFERSON LAB EH&S Committee Advisors:**

Bruce Ullman

Erik Abkemeier

#### **Other Representatives:**

Smitty Chandler

Patty Hunt

Christina Krasche

Bert Manzlak

Butch Meier

Hugh Williams

Ed Martin

1. Agenda was accepted as written.
2. The highlighted safety topic this month is protective eyewear. Make sure you take into consideration proper fit and protective qualities when making your selection. For those who are interested the following meeting may be attended:

#### **ASSE Peninsula Section January Breakfast Meeting**

**Topic:** ROGER S. HILL, MA, ABOC, LDO - "Eye Safety Essentials for the Safety Professional"

**Date:** Wednesday, January 12

**Time:** 7:30 - 9:00 AM

**Place:** Fountain Plaza 2 - 700 Town Center Drive in the James Room

**Address:** 700 Town Center Drive - Newport News, VA

**Cost:** Your time. Breakfast may be purchased at The Lunch Bell located in the building and brought to the meeting.

**Reservation:** Required by COB Monday January 10

**Contact:** Tim Belitz 875-7404 or [timothy.belitz@siemens.com](mailto:timothy.belitz@siemens.com)

**Guests:** Always welcomed and encouraged with a member. (Bert Manzlak (x7556) is a member and would be more than happy to sponsor anyone who would like to attend. )

3. Gas Cylinder Safety Team Progress Report - Bert Manzlak and his team have been reviewing potential storage areas and discussing options with Mark Waite. The team is progressing on time and anticipate their report to be completed by the next JEHS Meeting scheduled for February 4, 2004.

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4. Electrical Safety

- a. Butch Meier led a discussion regarding the recent SLAC Type A Report and its consequences to JLab operations. Attached you will find his overheads for review.
- b. The Electrical Safety Improvement Team has been asked to review its recommendations and prioritize them for lab implementation. This should be completed by January 14, 2005.
- c. Electrical safety self-assessment is to be conducted in advance of a DOE-SC visit which is tentatively scheduled for the end of February 2005.
- d. Butch Meier would like get the EHS Manual electrical safety into the EH&S Manual before the DOE-SC site visit.

5. Safety Initiatives

- a. A Safety Culture Perception Survey, prepared and administered by an outside consultant, is scheduled January 18-30, 2005. This survey is an attempt to provide confidential insight to the attitude of staff, users and subcontractors with regard to safety. All staff, users, and subcontractors should be encouraged to participate in the web-based, confidential, survey.
- b. The Lab has commissioned guest speaker Charles Moorcraft to present "Remember Charlie" regarding safety and the consequences not heeding safety precautions, on February 7, 2005. There will be two presentations, one in the morning and one in the afternoon. Both will be held in the CEBAF Auditorium. All staff, users, and subcontractors are encouraged to attend.
- c. Butch Meier would like feedback regarding the use of scrolling signs at the lab. This would include location, content, or general attitudes.
- d. Attached please find the Jefferson Lab Comprehensive Safety Strategy as presented to the lab by Butch Meier.

6. Reminders

- a. Review of three open IA recommendations for EH&S Officers/Staff:
  - i. Encourage the use of kneepads pending amendment of EH&S chapter 6620 – Personal Protective Equipment. Kneepads are available through the stockroom.
  - ii. Whenever an opportunity presents itself first-line supervisor should be reminded of their fundamental EH&S responsibilities as outlined in EH&S Chapter 2210.
  - iii. Ensure incident/injury investigation procedures and reports comply with the provisions outlined in Chapter 5200 – Incident/Injury Investigation.
- b. Please be reminded that a copy of all OSPs, TOSPs, SOPs should be provided to EH&S Reporting Office.
- c. This month's ISM Poster focuses on "The Safety Challenge." This challenge should be reviewed and discussed and all JLab staff, users and subcontractors should be aware of the significance of the achievement this quarter and encouraged to continue this safety attitude.

## SLAC Type A Investigation Report Overview

### Executive Summary

“The events leading up to and during the installation of the circuit breaker and the resultant arc flash are characteristic of an unstructured and largely undocumented approach to work that does not ensure the safety and health of workers at SLAC.”

“The significant breakdown in the enforcement of health and safety requirements is indicative of a work environment where occupational safety and health policies, programs, and procedures for worker protection are not fully implemented.”

“Personnel from the Environment, Safety, and Health (ES&H) Division were not present, as this organization monitors work on a random basis. Consequently, there was no SLAC safety professional involvement with this event.”

### Key Conclusions

SLAC’s policies, procedures, and contracting practices regarding subcontractor worker protection are not consistent with the OSHA safety electrical standards. Documented safety processes are not effectively implemented.

Unsafe conditions and operations have become accepted as a part of the everyday way of doing business.

Problems with electrical safety, particularly electrical hot work, are known within the ES&H and SE&M organizations.

The SLAC line organizations have been resistant to safety oversight, which should have elevated electrical safety work practice deficiencies to SLAC management’s attention for correction.

The work being done at the time of the accident violated *every* ISM Core Function and *every* ISM Guiding Principle. It also failed to provide worker protection in accordance with NFPA 70E.

## **Management Systems Evaluation**

### Contracting Practices, Roles, Responsibilities

#### DOE Site Office

SSO is ... expected to be closely involved in the contractor's ISMS approval and configuration process and in the contractor's self-assessment validation process.

Contract performance – adjectival assessment. Laboratory Appraisal Process

#### Laboratory

- “The Board concludes that the ineffective of ISM in certain divisions has been a long term and continuing problem – ... consistently placed operations ahead of safety.” (This mission vs. safety theme is repeated numerous times in the Report)
- WSS set is not being fully implemented at SLAC (NFPA70E, OSHA)
- “The Board concludes the documented safety practices (Job Hazard and Mitigation) are not effectively implemented by the (Maintenance Organization)”
- “The Board concludes that unsafe conditions and operations have become an accepted part of the everyday way of doing business”
- “The Board concludes that rigorous safety oversight, which should have elevated these issues for correction, is frowned upon and given very low priority”
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#### Subcontractor

- “Since the Bay Span workers’ tenure at SLAC is closely tied to satisfying the UTR, the Board concludes that a situation exists where workers might willingly take risks in order to demonstrate productivity and thus continue to work at the high wages. (Davis Bacon Act)
- “The Board found no evidence that the requirements in the Bay Span subcontract are being followed.
- “The Board concludes that Bay Span employees BSE-1 and BSE-2 contributed to this accident by failing to follow NFPA 70E, the terms of the Bay Span sub-contract, and the guidance contained in the Bay Span employee handbook.”

## OSHA Compliance

“29 CFR1910.147(f)(2)(i) requires the host employer [SLAC] and contract employer [Bay Span] to inform each other about their respective lockout or tagout procedures. Such coordination is necessary to ensure that both sets of employees will be protected from hazardous energy.

### Qualifications

#### Hazard Assessment

- Standard OSHA hazards assessment requirements of 29CFR1910.132 cited
- The Board was not provided evidence that any documented hazard assessment had been accomplished for the circuit breaker installation.

#### Electrical Safety Work Practices

- Given SE&M’s and Bay Span’s decision to attempt to install the circuit breaker with Panel 4P20R energized, they failed to identify other safety-related work practices (such as NFPA 70E) to protect employees who were exposed to the electrical hazards involved. The Board concludes that this failure violated the provisions of 29 CFR1910.333(a)(2)
- Electrical Work Permit only contained 2 of 11 NFPA 70E provisions

## SLAC Integrated Safety Management System

- *SLAC Safety Management System* Overview states “The control of hazards may be within the manager’s experience and can be specified and implemented at the manager’s discretion. Normally authorization to proceed is simply an instruction from the manager or supervisor.”
- “The Board finds these last statements to be so vague that they contribute to a work environment where SE&M managers routinely perform undocumented hazardous work, making it difficult audit any hazardous task following the *SLAC Safety Management System*. In fact, the Board finds that the “Overview” section words undermine the value of the *SLAC Safety Management System*.”

## **Justifications of Need from SLAC Type A Investigation Report**

### **Laboratory Justifications of Need**

**JON 1:** SLAC needs to enforce applicable OSHA standards and all sections of NFPA 70E.

**JON 2:** SLAC needs to ensure that SLAC's employees who work on or near exposed energized electrical conductors are trained on the implementation of electrical safety-related work practices.

**JON 3:** SLAC needs to verify that subcontractor employees who work on or near exposed energized electrical conductors are trained on the implementation of electrical safety-related work practices.

**JON 4:** SLAC and subcontractor supervisors and managers need to receive the same training as the workers.

**JON 7:** SLAC needs to revise the contracting process to ensure that subcontractor workers can protect themselves from SLAC-related hazards in the same way that SLAC workers protect themselves. The terms and conditions of subcontracts should not encourage workers to take risks.

**JON 8:** The SLAC Director needs to balance the priorities between operations and safety to:

- ⌚ Evaluate whether it is appropriate for the Technical Division to be responsible for scheduling LINAC operations and safely maintaining the LINAC infrastructure.
- ⌚ Achieve effective, proactive ES&H Division involvement.
- ⌚ Encourage SE&M employees to work safely and to exercise their stop work authority.

**JON 9:** SLAC needs to develop and implement safety oversight programs designed to identify deficient electrical work practices and correct them in a timely manner that achieves continuous improvement.

**JON 11:** The SLAC Director needs to ensure that employees at all levels fully understand that concern for mission accomplishment does not outweigh the need for safe operations

### **Site Office Justifications of Need**

**JON 5:** SSO needs to exercise the existing SLAC contract clauses, terms, and conditions that hold SLAC accountable for unacceptable safety performance, including stop work authority or the embargo of funds until SLAC demonstrates satisfactory electrical safety performance.

**JON 6:** SSO needs to ensure that legal interpretations by SLAC to establish each employer's worker protection responsibilities are consistent with OSHA's interpretations on multiemployer workplaces.

**JON 10:** SSO needs to develop and implement safety oversight programs designed to identify deficient electrical work practices and correct them in a timely manner that achieves continuous improvement.